

Multi-Hazard Mitigation Plan Mitigation Annual Progress Report

January 2014

Initiative Description	Update
A. Prevention	
Develop a Spill and Industrial Accidents Action Plan (City Fleet Yard)	The City has prepared a Spill Prevention, Control and Countermeasure (SPCC) plan for Fleet (360 S. Hudson Street) to address what measures are to be taken in the event of a spill. Training was also held for City staff to provide a clear understanding of spill response procedures. The SPCC plan is available for review in Engineering as well as at Fleet services.
Early warning system	The early warning system has yet to be developed; however, the City has partnered with Greenville County to obtain real time Reedy River water elevations to incorporate into its situational awareness program, which is used by critical departments within the City to prepare for flood events. In addition, the City has installed two additional monitoring stations along the Reedy River to provide real time rainfall amount and river stage data that has also be incorporated into the situational awareness software. The installation of the monitoring stations has been critical when monitoring the elevation of the Reedy River in order to determine when to mobilize to prepare City facilities for imminent flooding as well as prepare to assist citizens as needed.
Develop a plan for post-disaster nuclear power cleanup	The city of Greenville is not considered an at- risk county by FEMA and the Nuclear Regulatory Commission during a nuclear event. Greenville County is a host county for the Oconee Nuclear Evacuation Plan and the City participates in all of the exercises preparing for a nuclear event.
Severe rain event sewage study	The City uses 13 flow meters to measure the amount of wastewater flow during dry weather versus rain events to identify the amount of rainfall dependent inflow and infiltration entering the system. These meters are placed throughout the City's sewer system and as data is obtained it is analyzed in order to assess the condition of the system upstream from each flow meter. Based on this data, areas requiring rehabilitation can be identified and incorporated into the Capital Improvement Program. Currently, the flow metering results have identified 47% of the City's

	sewer system which does not have excessive rainfall dependent inflow and infiltration. The City has commenced with fixing sewers that have been found to be in a state of disrepair through the City including the Haynie Serrine neighborhood, Verdae, and the northern section of the City.
Collaborate with National Weather Service "Turn Around, Don't Drown" Campaign	No progress made
Arboricultural tree study	No progress made
Underground Electricity Plan	<p>In December 2005, the Greenville area experienced a catastrophic ice storm, during which thousands of city residents endured days-long power outages. Since that time, the City of Greenville has been working to develop a program that would reduce the time it takes for power to be restored to citizens.</p> <p>Over the past few years, Duke Energy and the City have worked together to establish an ongoing program to bury service lines in residential areas. A service line is the power line that runs from Duke Energy's pole to the home's meter base. Service lines that are buried are less likely to be damaged during a storm event because they are underground; therefore, each home that has a buried service line eliminates one extra step in the power restoration process.</p> <p>While converting overhead power lines to underground can be a complex and costly endeavor, the City's Weather The Storm, Keep It On program has been designed to streamline the process for burying residential service lines and to make it an affordable option for homeowners by providing financial assistance.</p> <p>To date, roughly 982 residential service lines have been buried within the city limits. Additionally, construction is complete for two undergrounding projects. The first was the Haywood Road commercial corridor project which included burying approximately 900 linear feet of power lines and the second was on Camperdown Way which included another 900 linear feet of power lines buried between South Main Street and River Street.</p>
Storm Debris Removal Process Plan	No progress made
Create Firebreaks around Critical	The critical facilities within the corporate limits of

Facilities	the city of Greenville have firebreaks.
B. Public Education & Awareness	
Enhance GIS database	The City created several interactive mapping/GIS based websites for the public. The interactive mapping shows all of the parcels within the city, 2013 aerials, FEMA special flood hazard areas, City flood study data, fire districts and serving fire stations and fire hydrants. Properties are easily located by simply entering an address. https://gis.greenvillesc.gov/WheresMyHouse/
CISM post-disaster stress relief program	The City of Greenville has a certified chaplain for its internal staff during traumatic events. The City does not offer any post traumatic stress relief for the public.
Enhance hazards education	The City sends mailers to its city residents about flood hazards within the city. The majority of the remaining natural hazards are addressed by Greenville County on a seasonal basis.
Installation of rain gauges	The City has rain gauges installed at several of its fire stations; however, the gauges require the data to be manually retrieved. The City has installed two rain gauges along the Reedy River, which provide real-time rainfall amounts. Additional rain gauges will be installed in the city in future years.
C. Natural Resources Protection	
White Oak Basin watershed study	The White Oak Basin watershed study was completed in 2012 and the data was provided to FEMA for incorporation into its Map Modernization, which will generate new flood maps for the city of Greenville, with issuance anticipated in early 2014.
Address erosion control (Reedy River & Landfill)	There are currently no erosion issues to be addressed at the landfill as they have already been addressed on an as-needed basis. Multiple Reedy River bank stabilization/restoration projects have commenced since May 2010. These include Reedy River at McDaniel Bridge and at the parallel pedestrian bridges along the trail. The City is also under design for an additional \$450,000 worth of bank stabilization. This additional work is slated to commence construction the latter half of 2013.
Develop riverine crews to assist with debris removal	No progress made
Reedy River Dam gate sediment removal maintenance plan	The sluice gate at the Reedy River Dam was opened in early 2012 and the sediment at the back side of the dam was removed in accordance with a permit received from the Army Corps of Engineers.
D. Emergency Services	
Reassessment of Reverse 911	The City has installed a new 911 system within the

System (Bi-lingual)	last year. This system will allow for many improvements to the 911 system, including adding bilingual messages as resources allow. The City also uses reverse 911 when practicable during significant weather events.
Provide backup generators for key intersections and critical facilities	The majority of the critical facilities have sufficiently sized backup generators. There are limited resources available at this time for installing backup generators at key intersections.
Enhance "Officer Century" emergency devices	No progress made
Incorporating National Weather Service in post-disaster review meetings	No progress made
Increase number of City represented CERT program participants	No progress made
E. Property Protection	
Dwelling Elevation Program	No progress made
Relocate Public Works facility	Land located on Fairforest Way has been purchased by the City for the relocation of Public Works.
Stock piling debris locations	No progress made
F. Structural Projects	
Stone Lake Dam restoration	The City repaired the face of the dam in 2013 and repaired the existing siphon so that it is once again functional.